



No.:
RCMSZ2025-0003-EMC

TEST REPORT

NAME OF SAMPLE : Presence Multi-Sensor FP300

APPLICANT : Lumi United Technology Co., Ltd

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.



Applicant		Name: Lumi United Technology Co., Ltd Address: Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China	
Manufacturer		Name: Lumi United Technology Co., Ltd Address: Room 801-804, Building 1, Chongwen Park, Nanshan iPark, No. 3370, Liuxian Avenue, Fuguang Community, Taoyuan Residential District, Nanshan District, Shenzhen, China	
Equipment Under Test		Name: Presence Multi-Sensor FP300 Model/Type: PS-S04E Additional Model: PS-S04D Serial NO.: N/A Sample NO.: FCCSZ2025-0020_2-1	
Date of Receipt.	Feb.14,2025	Date of Testing	Feb.14,2025~ May 28,2025
Test Specification		Test Result	
AS/NZS CISPR 32:2015+A1(2020), Class B		PASS	
Evaluation of Test Result		The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: Jun.20,2025	
Compiled by: Liang Jiatong Liang Jiatong Name Signature	Reviewed by: Mo Xianbiao Mo Xianbiao Name Signature	Approved by: Dong Sanbi Dong Sanbi Name Signature	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed		Fail = failed	N/A= not applicable
EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RCMSZ2025-0003-EMC	Original release	Jun.20,2025



1 SUMMARY OF TEST RESULTS

EMISSION			
Standard	Test Item	Result	Remarks
AS/NZS CISPR 32:2015+A1(2020), Class B	Radiated Test (30MHz~ 1GHz)	PASS	Minimum passing margin is 11.77dB at 959.838MHz
	Radiated Test (Above 1GHz)	PASS	Minimum passing margin is 13.23dB at 5346.10MHz



1.1 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial Number	Cal. interval	Cal. Day	Cal. Due
RE Test - 3M Chamber						
EMI Test Receiver	Rohde&Schwarz	ESR 26	101718	1 year	2025/05/22	2026/05/21
Loop antenna (8.3k~30MHz)	Rohde&Schwarz	HFH2-Z2E	100951	1 year	2024/06/04	2025/06/03
Antenna(30MHz~1000MHz)	SCHWARZBECK	VULB 9168	1132	1 year	2025/02/28	2026/02/27
3m anechoic chamber	MORI	966	N/A	1 year	2025/05/19	2026/05/18
Preamplifier(10kHz-1GHz)	Rohde&Schwarz	SCU-01F	100298	1 year	2025/04/23	2026/04/22
Preamplifier(1GHz-18GHz)	Rohde&Schwarz	SCU-18F	100799	1 year	2025/04/23	2026/04/22
#1 control room	MORI	433	/	3year	2023/05/17	2026/05/16
Temperature and humidity meter	/	C193561473	C193561473	1 year	2025/04/29	2026/04/28



1.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

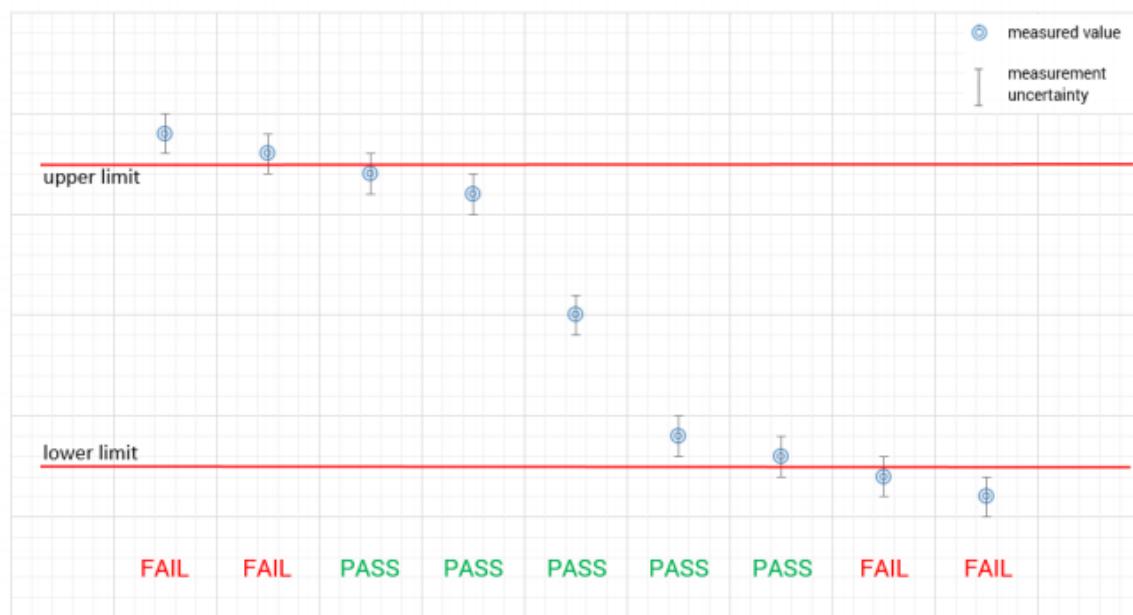
No.	Item	Measurement Uncertainty
1	Conducted emission test	+/-2.70 dB
2	Radiated emission 30MHz-1GHz	+/-4.6 dB
3	Radiated emission 1GHz-18GHz	+/-4.4 dB
4	Radiated emission 18GHz-40GHz	+/-5.1 dB

Remark: 95% Confidence Levels, k=2.

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed.

The measurement uncertainty is mentioned in this test report, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong.

measured value, measurement uncertainty, verdict



1.3 TEST LOCATION

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology (Shenzhen) Co., Ltd.

Lab Address: No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

Post Code: 518110 Tel: 0755-23763060-8805

Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn

FCC(Test firm designation number: CN1363)

IC(Test firm CAB identifier number: CN0137)

CNAS(Test firm designation number: L16091)



2 GENERAL INFORMATION

2.1 GENERAL PRODUCT INFORMATION

PRODUCT NAME	Presence Multi-Sensor FP300					
BRAND NAME	N/A					
MODEL NAME	PS-S04E					
ADDITIONAL MODEL	PS-S04D					
POWER SUPPLY	DC 3V from battery(2*CR2450*3V)					
OPERATING FREQUENCY	MODE	TX(MHz)	RX(MHz)			
	Thread	2402~2480	2402~2480			
	Radra	60000 ~ 61560	60000 ~ 61560			
	Zigbee	2405	2475			
I/O PORTS	Refer to user's manual					
CABLE SUPPLIED	N/A					
Remark:						
1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual. 2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report. 3. Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, CVC is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.						

2.2 DESCRIPTION OF ACCESSORIES

N/A



2.3 INDEPENDENT OPERATION MODES

The EUT were tested under the following modes, the final worst mode was marked in boldface and recorded in this report.

EMISSION Test Modes		
For Radiated Emission Tests		
	Test Mode	Test Voltage
1	Normal working+Zigbee+Radar+IR	DC 3V from Battery
2	Normal working+Thread+Radar+IR	DC 3V from Battery

2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to the specifications of the manufacturers, the EUT must comply with the requirements of the following standards:

AS/NZS CISPR 32:2015+A1(2020), Class B

All test items have been performed and recorded as per the above standards.

2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support Equipment							
NO	Description	Brand	Model No.	Serial Number	Supplied by		
1	Gateway	Aqara	Hub M3	16198920	Client		
2.	Mobbile Phone	Samsung	S23 Ultra	R5CWB33DN5R	Lab		
Support Cable							
NO	Description	Quantity (Number)	Length (m)	Detachable (Yes/ No)	Shielded (Yes/ No)	Cores (Number)	Supplied by
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A



3 EMISSION

3.1 RADIATED EMISSION

3.1.1 LIMITS OF RADIATED

FOR FREQUENCY BELOW 1000 MHz

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 10m)
	Quasi-Peak dBuV/m	Quasi-Peak dBuV/m
30 – 230	40	30
230 – 1000	47	37

FREQUENCY (MHz)	Class A (at 3m)	Class B (at 3m)
	Quasi-Peak dBuV/m	Quasi-Peak dBuV/m
30 – 230	50	40
230 – 1000	57	47

FREQUENCY RANGE OF RADIATED MEASUREMENT

(For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	Up to 5 times of the highest frequency or 6 GHz, whichever is less

FOR FREQUENCY ABOVE 1000 MHz

FREQUENCY (GHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
1 to 3	76	56	70	50
3 to 6	80	60	74	54

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

3. All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.



3.1.2 TEST PROCEDURES

1. From 30 MHz to 1GHz test procedure as below:

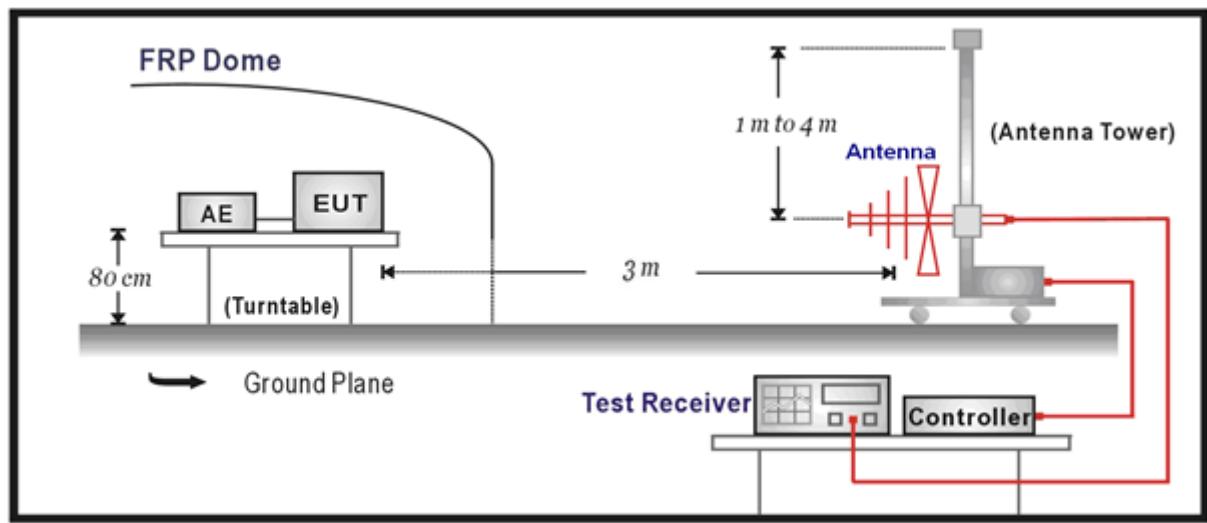
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

2. Above 1GHz test procedure as below:

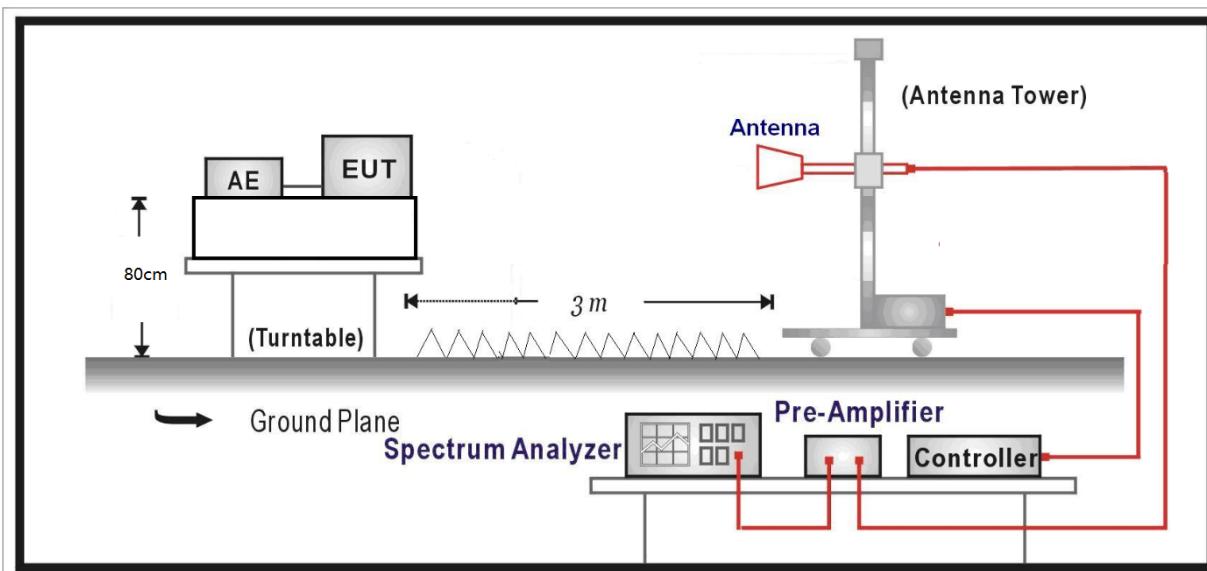
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test receiver/spectrum was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

3.1.3 TEST SETUP

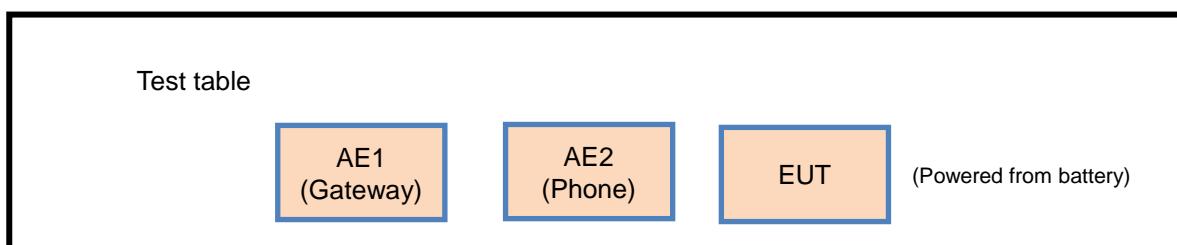
Below 1GHz Test Setup:



Above 1GHz Test Setup:



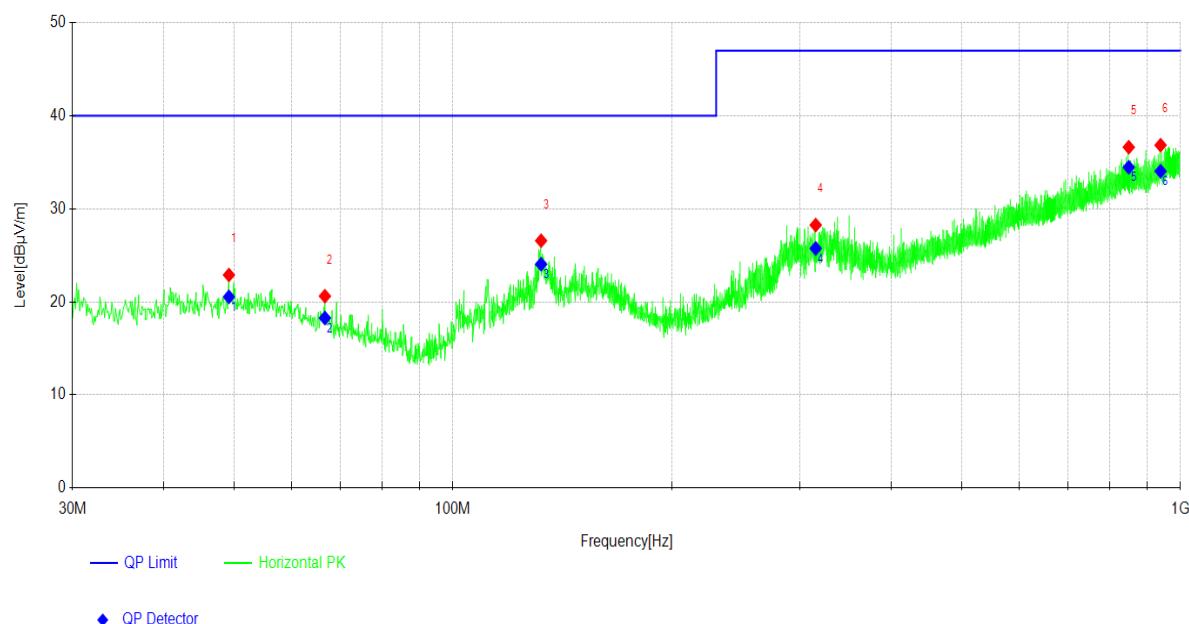
Configuration of Tested System





3.1.4 TEST RESULTS (BELOW 1GHZ)

Test Mode:	TM1	Frequency Range	30-1000MHz
Test Voltage	See item 2.3	Detector Function	Quasi-Peak(QP)
Environmental Conditions	25.3deg. C,56% RH	Tested By	Wang Zhiming

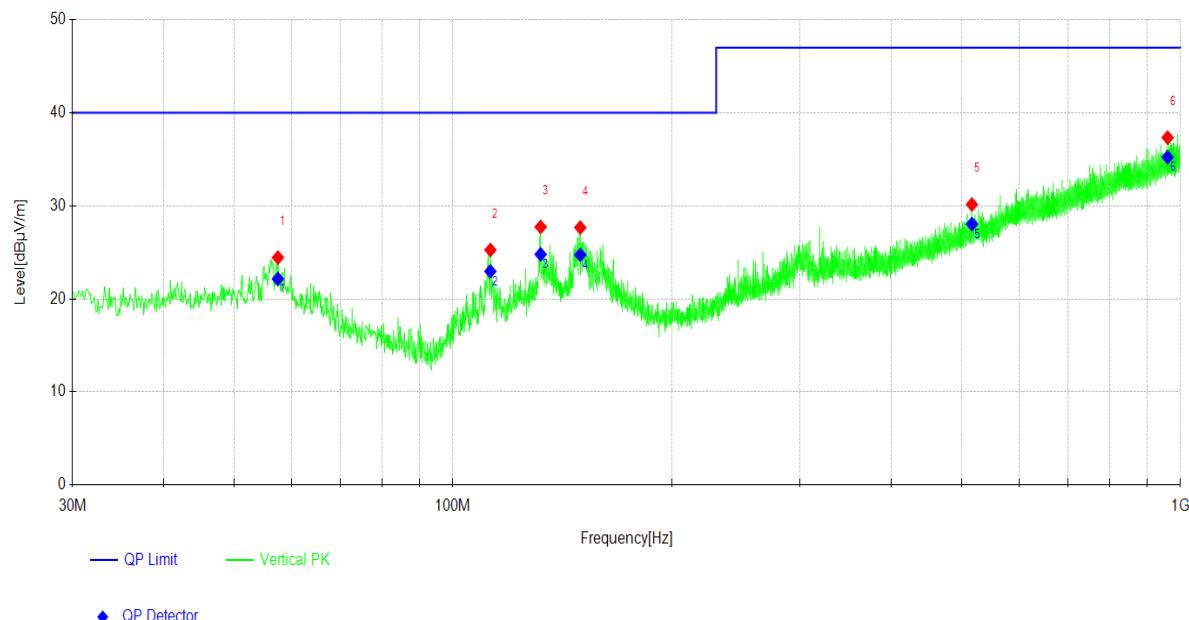


NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.208	20.23	20.54	40.00	19.46	200	96	Horizontal
2	66.670	18.16	18.27	40.00	21.73	100	205	Horizontal
3	132.151	19.11	24.05	40.00	15.95	200	4	Horizontal
4	315.112	21.00	25.74	47.00	21.26	100	78	Horizontal
5	848.665	30.79	34.46	47.00	12.54	200	358	Horizontal
6	938.593	32.03	34.04	47.00	12.96	200	0	Horizontal

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]



Test Mode:	TM1	Frequency Range	30-1000MHz
Test Voltage	See item 2.3	Detector Function	Quasi-Peak(QP)
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

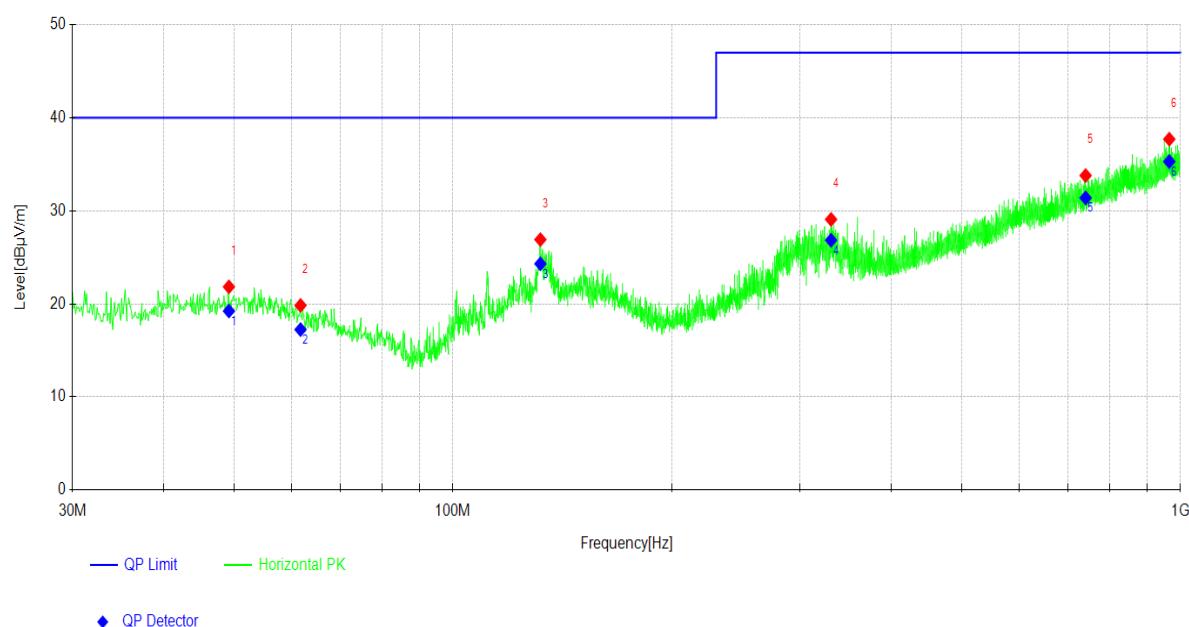


NO.	Freq. [MHz]	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	57.454	19.71	22.14	40.00	17.86	100	161	Vertical
2	112.555	17.28	22.96	40.00	17.04	200	274	Vertical
3	131.957	19.10	24.79	40.00	15.21	100	41	Vertical
4	149.613	20.11	24.73	40.00	15.27	100	350	Vertical
5	516.601	25.77	28.04	47.00	18.96	100	96	Vertical
6	959.838	32.29	35.23	47.00	11.77	100	96	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]



Test Mode:	TM2	Frequency Range	30-1000MHz
Test Voltage	See item 2.3	Detector Function	Quasi-Peak(QP)
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

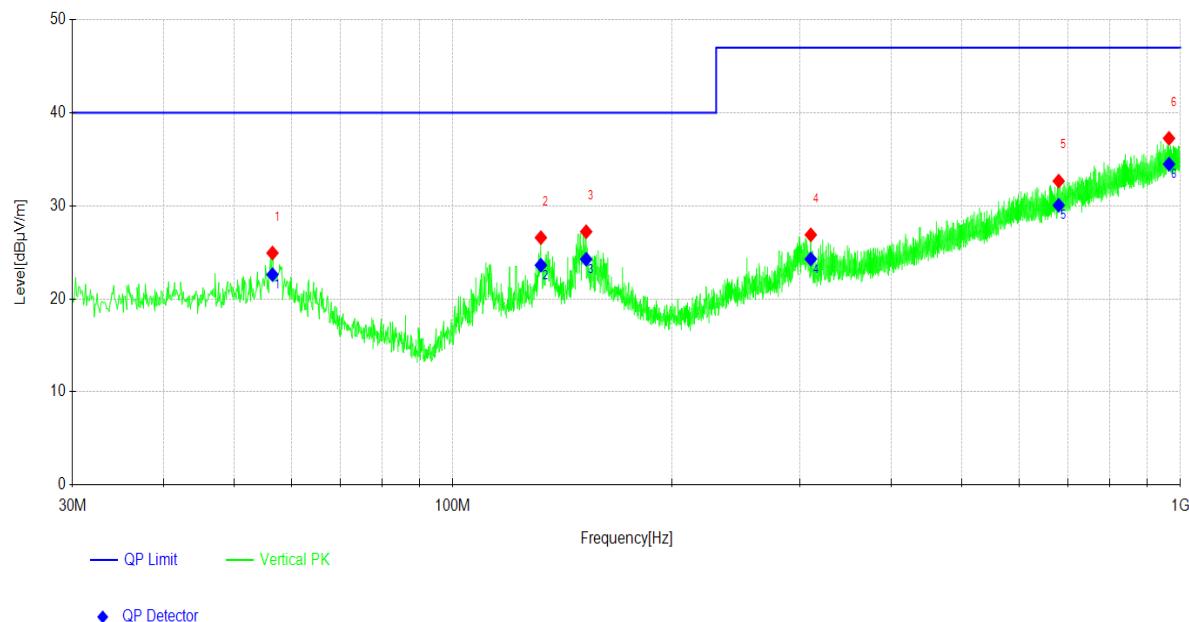


NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.208	20.25	19.23	40.00	20.77	100	2	Horizontal
2	61.722	18.70	17.24	40.00	22.76	100	170	Horizontal
3	131.860	19.13	24.31	40.00	15.69	100	2	Horizontal
4	330.827	21.53	26.84	47.00	20.16	100	89	Horizontal
5	740.305	29.81	31.38	47.00	15.62	100	35	Horizontal
6	964.785	32.68	35.29	47.00	11.71	100	2	Horizontal

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]



Test Mode:	TM2	Frequency Range	30-1000MHz
Test Voltage	See item 2.3	Detector Function	Quasi-Peak(QP)
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

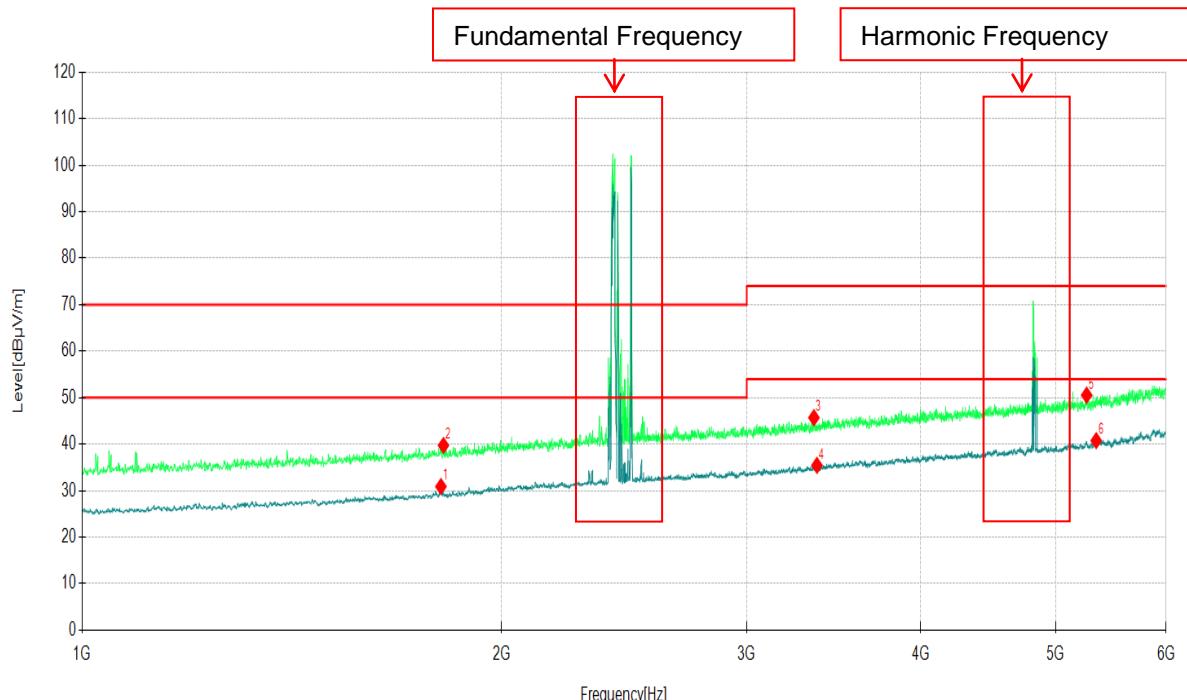


NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	56.484	19.87	22.61	40.00	17.39	200	2	Vertical
2	132.054	19.13	23.62	40.00	16.38	100	62	Vertical
3	152.426	20.22	24.26	40.00	15.74	100	321	Vertical
4	310.261	20.96	24.28	47.00	22.72	200	105	Vertical
5	679.868	28.38	30.06	47.00	16.94	100	54	Vertical
6	964.009	32.63	34.48	47.00	12.52	100	66	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]

3.1.5 Test Results (Above 1GHz)

Test Mode:	TM1	Frequency Range	Above 1G
Test Voltage	See section 2.3	Detector Function	PK/AV
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

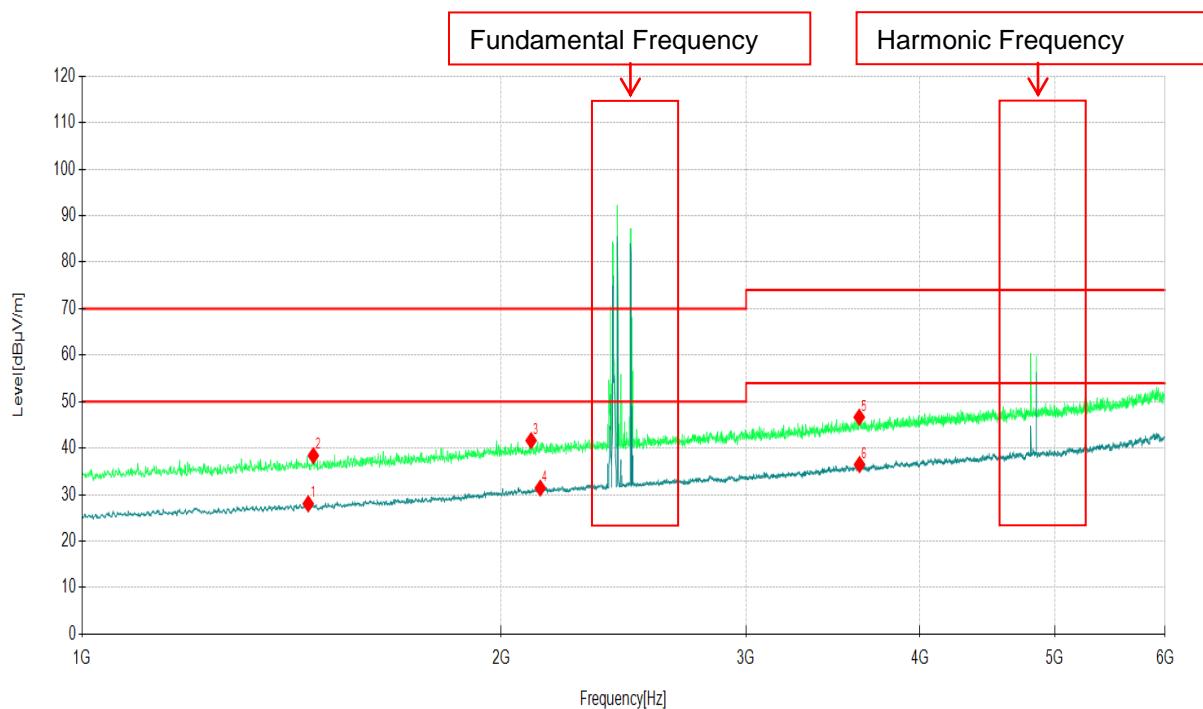


NO.	Freq. [MHz]	Reading [dB μ V]	Factor [dB/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Polarity
1	1809.59	37.61	-6.72	30.89	50.00	19.11	AV	Horizontal
2	1817.14	46.54	-6.81	39.73	70.00	30.27	PK	Horizontal
3	3352.33	46.45	-0.75	45.70	74.00	28.30	PK	Horizontal
4	3369.32	35.95	-0.50	35.45	54.00	18.55	AV	Horizontal
5	5262.12	45.24	5.31	50.55	74.00	23.45	PK	Horizontal
6	5346.10	35.60	5.17	40.77	54.00	13.23	AV	Horizontal

- Remark:
1. The emission levels of other frequencies were greater than 20dB margin.
 2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
 3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
 4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]
 5. Fundamental frequency and Harmonic frequency are not required within this specification



Test Mode:	TM1	Frequency Range	Above 1G
Test Voltage	See section 2.3	Detector Function	PK/AV
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

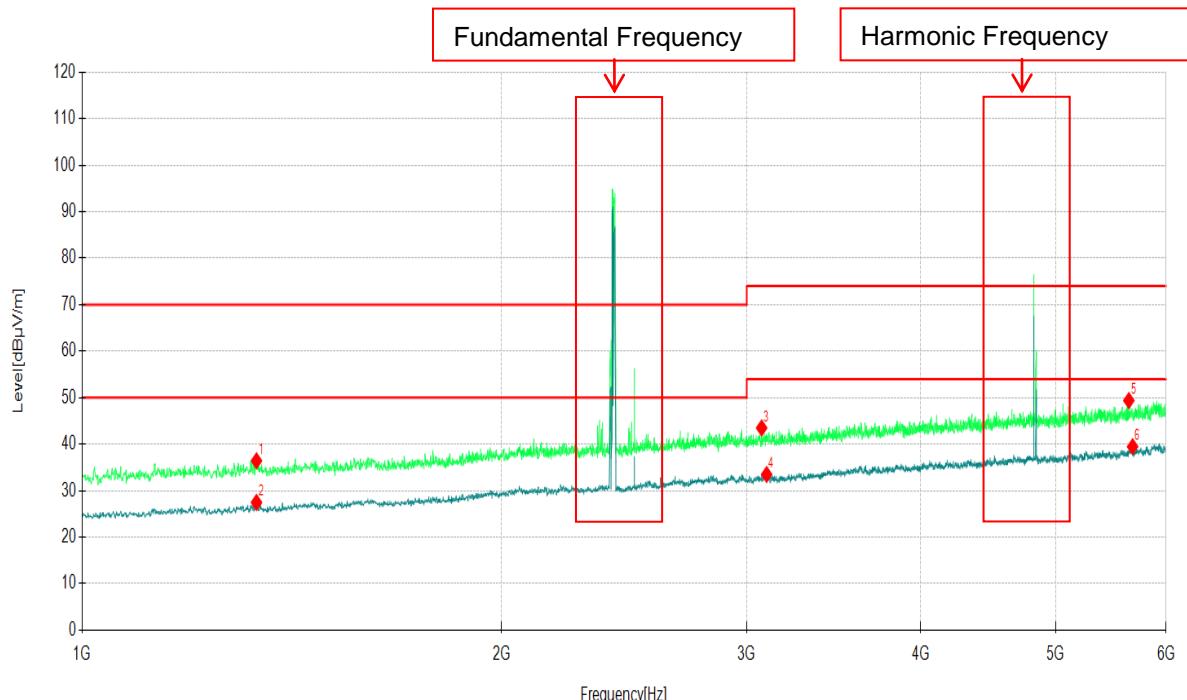


Suspected Data List								
NO.	Freq. [MHz]	Reading [dB μ V]	Factor [dB/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Polarity
1	1453.86	36.66	-8.62	28.04	50.00	21.96	AV	Vertical
2	1466.13	46.95	-8.55	38.40	70.00	31.60	PK	Vertical
3	2102.09	46.73	-5.09	41.64	70.00	28.36	PK	Vertical
4	2134.18	36.19	-4.76	31.43	50.00	18.57	AV	Vertical
5	3617.48	45.83	0.83	46.66	74.00	27.34	PK	Vertical
6	3619.36	35.47	1.01	36.48	54.00	17.52	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]
5. Fundamental frequency and Harmonic frequency are not required within this specification



Test Mode:	TM2	Frequency Range	Above 1G
Test Voltage	See section 2.3	Detector Function	PK/AV
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming

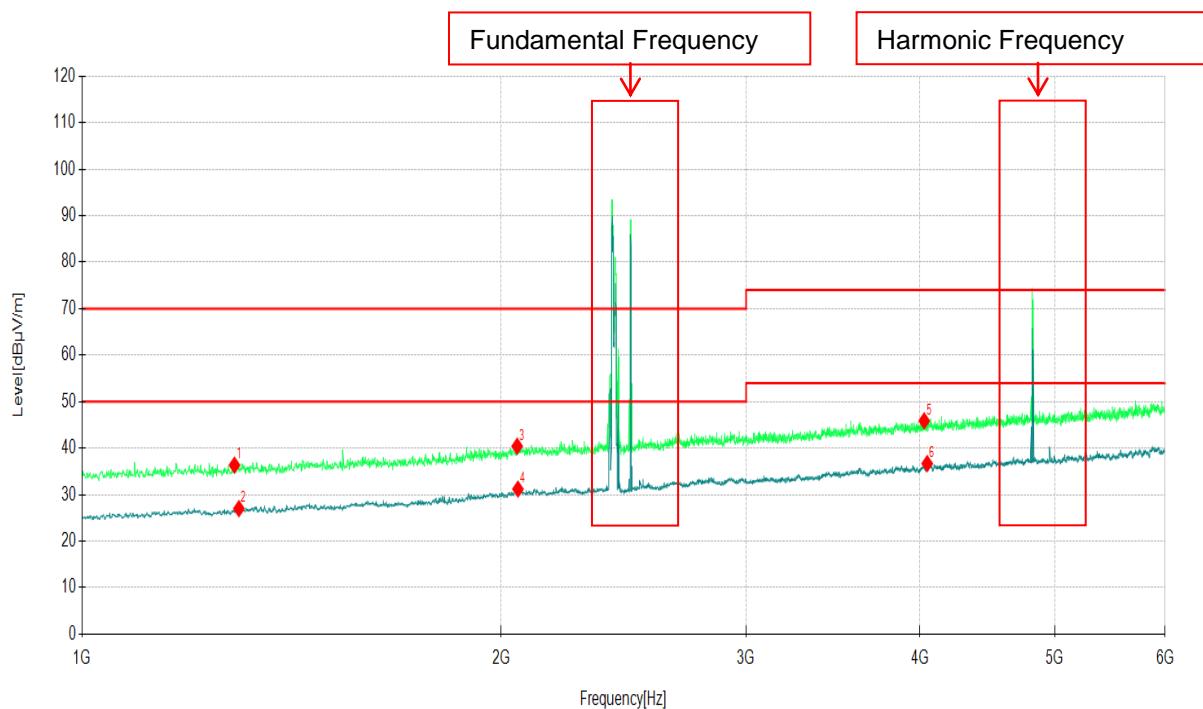


NO.	Freq. [MHz]	Reading [dB μ V]	Factor [dB/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Polarity
1	1334.03	45.75	-9.32	36.43	70.00	33.57	PK	Horizontal
2	1334.03	36.79	-9.32	27.47	50.00	22.53	AV	Horizontal
3	3074.92	45.09	-1.60	43.49	74.00	30.51	PK	Horizontal
4	3100.40	34.84	-1.36	33.48	54.00	20.52	AV	Horizontal
5	5642.39	44.00	5.39	49.39	74.00	24.61	PK	Horizontal
6	5677.30	33.38	6.09	39.47	54.00	14.53	AV	Horizontal

- Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]
5. Fundamental frequency and Harmonic frequency are not required within this specification



Test Mode:	TM2	Frequency Range	Above 1G
Test Voltage	See section 2.3	Detector Function	PK/AV
Environmental Conditions	25.3deg. C, 56% RH	Tested By	Wang Zhiming



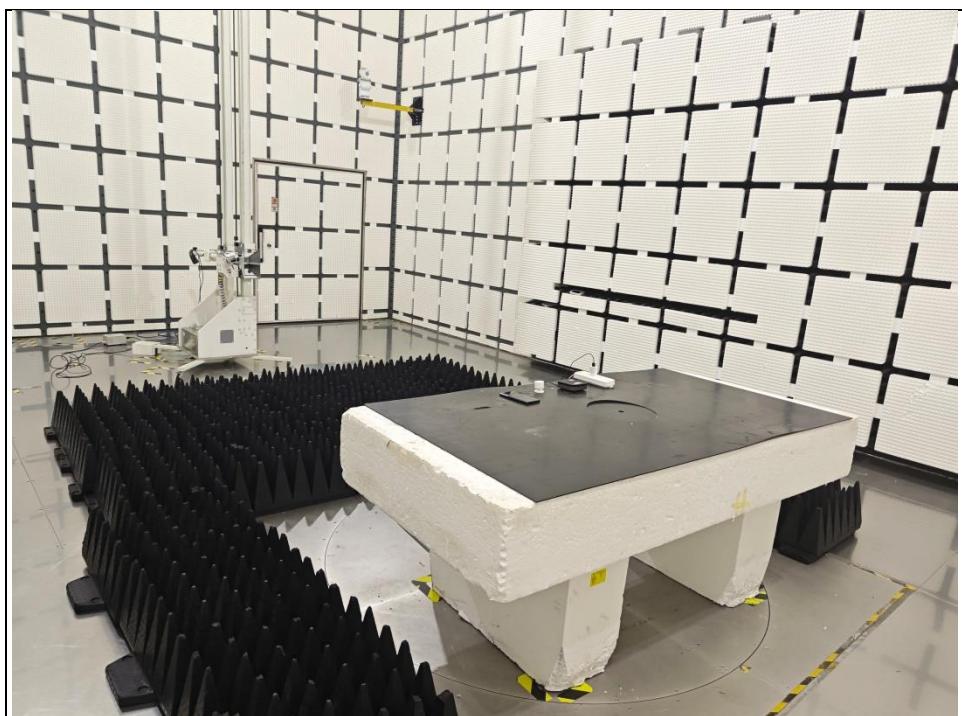
Suspected Data List								
NO.	Freq. [MHz]	Reading [dB μ V]	Factor [dB/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Polarity
1	1286.85	45.99	-9.64	36.35	70.00	33.65	PK	Vertical
2	1296.28	36.54	-9.54	27.00	50.00	23.00	AV	Vertical
3	2053.97	45.38	-4.96	40.42	70.00	29.58	PK	Vertical
4	2056.80	36.00	-4.80	31.20	50.00	18.80	AV	Vertical
5	4027.93	44.16	1.72	45.88	74.00	28.12	PK	Vertical
6	4047.74	35.15	1.54	36.69	54.00	17.31	AV	Vertical

Remark: 1. The emission levels of other frequencies were greater than 20dB margin.
2. Level (dB μ V/m) = Reading (dB μ V/m) + Factor (dB/m).
3. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. Margin(dB) = Limit[dB μ V/m] - Level [dB μ V/m]
5. Fundamental frequency and Harmonic frequency are not required within this specification

4 PHOTOGRAPHS OF TEST SETUP



RADIATED EMISSION TEST BELOW 1GHz



RADIATED EMISSION TEST ABOVE 1GHz



5 PHOTOGRAPHS OF THE EUT

Please refer to the attached file (Test Setup Photo).

----- End of the Report -----



Important

- (1) The test report is invalid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

Address: No. 1301-14&16, Guanguang Road, Xinlan Community, Guanlan Subdistrict, Longhua District, Shenzhen, Guangdong, China

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<http://www.cvc.org.cn>